

NOTES ON THE OCCURRENCE OF ARTESIAN WELLS IN THE ALBERT
DISTRICT, NEW SOUTH WALES.

BY C. S. WILKINSON, L.S., F.G.S.

As the occurrence of Artesian wells on the Messrs. Officer's Killarah Run, near the Darling River, may not be generally known to the members of this Society, I desire to lay before them a few particulars regarding it.

In putting down some tube-bores at the so-called "Mud Springs" of Wee Wattah and Mulyeo, at Killarah, Mr. David Brown, manager for the Messrs. Officer Bros., struck a strong flow of water, which, at the Wee Wattah spring rose in the bore and flowed from the tube at a height of twenty-six feet above the surface of the ground. Some months ago Mr. Brown personally informed me of his important discovery; and more recently Mr. H. A. Gilliat, Government Inspector of Tanks, who has seen the wells, has also given me a description of them which I will relate to you in his own words.

"The Wee Wattah Well is in a large flat about eighteen miles back from the River Darling. Mr. Brown had five bores put down, varying from 134 to 142 feet, from all of which water was obtained. But from the last bore water is now running Mr. Brown estimates, at the rate of nine gallons per minute, with a temperature at the surface, of 82° Fahr. All the others were choked by the fine drift coming up the pipe; some iron pyrites, and a few water worn pebbles were found amongst the drift. The bore passes through clay and clay mixed with drift until the water was struck at 110 feet.

"The water has flowed over pipes screwed on at a height of twenty-six feet above the surface, and without perceptible diminution of the supply to ten feet above the surface.

"From one of the bores water flowed for some time at the rate of fifty gallons per minute, but it soon became choked with the drift. Four inch pipes are used in the bores.

“Close to this is a Mud spring, about forty feet in diameter, there is no perceptible flow from it, but water is always to be found in a hole that has been opened in it. It is similar to some found on the Flinders, in the neighbourhood of Mount Brown, though not retaining the usual shape of a regular truncated cone, which may be owing to it having been trampled down by cattle.

“Mullyeo is fourteen miles North-east from Wee Wattah, and twenty-four miles back from the Darling. Close to an old native spring Mr. Brown has put down four bores, all of which are still running, although the pipes have been drawn from three on account of the small supply.

“In the last bore put down, water was struck at 49 feet, and is flowing at the surface at the rate of twelve gallons per minute; the water here is cooler at the surface, the temperature being about 63° Fahr. I have placed in Mr. Wilkinson’s hands some small pieces of bone, found in these bores. Water was struck first at seventeen feet from the surface, and the bore went through drift with no clay from the surface. The flow ceases at a height of four feet above the surface. The pipes are of the same diameter as at Wee Wattah.

“Goomery is on the Toorah Run, belonging to Messrs. McCaughey and Co., the owners of the Dunlop Station. I am informed that the bore is about 100 feet deep, and the water rises to the surface; the supply is small; it is about twenty-five miles back from the river, and is in a line with the two wells just described. I was unable to visit it, and I am consequently unable to give any particulars.”

This discovery of Artesian water is of great importance; and I have no doubt but that in many other localities throughout the Darling District similar water supply will be obtained.

The fragments of bones above referred to, are probably, those of the *Diprotodon*; with them Mr. Brown also found fragments

of petrified wood. The water-bearing strata are of Post Pliocene age.

CONTRIBUTION TO A SOUTH QUEENSLAND FLORA.

BY THE REV. B. SCORTECHINI, L.L.B.

The only department of Australian Botany, which has received as yet any thing like a fair share of study from scientific men, is the taxological department. Much road remains untrodden before we shall go through all the branches of Australian Botany. Many treasures lie hidden under ground, which paleontological Botany will some day bring to light. Many medicinal properties, useful and economic principles, pervade our plants, which botanic chemistry will in future wrest from them. Little or nothing has been done in cryptogamic Botany. Even in systematic Botany not a little is left undone.

If that imperishable monument raised by the genius and labour of Bentham and Mueller—the *Flora Australiensis*—is a sure guide to the classification of Australian plants, and as such cannot be surpassed, yet the distribution of our plants is very imperfectly known. To this knowledge, the compilation of local Floras will lead, a work of time and patience. Few of them as yet exist. Towards the completion of a South Queensland Flora I beg to contribute a list of some plants, which are not known to science as existing in South Queensland. The area in which I met them growing extends from South and West of the Logan waters to the border of the Colony, and the Pacific sea-shore. The President of this Society and Mr. Bailey have already given us a complete census of the Brisbane Flora, which takes a radius of twenty-five miles around Brisbane. The incomplete list I now offer, begins where the Brisbane Flora list ends, on the south side.

Much the same Flora as that of Brisbane prevails in this area, but many inhabitants of the New South Wales Flora enter our